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Jameco Part Number 217234 (SDM30-12S12)

MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

SDM30 SERIES

.2:1 INPUT RANGE

.BUILD IN EMI FILTER

.REMOTE ON-OFF CONTROL

.SHORT CIRCUIT PROTECTION

.OVERLOAD, OVER VOLTAGE PROTECTION

.LOW RIPPLE NOISE

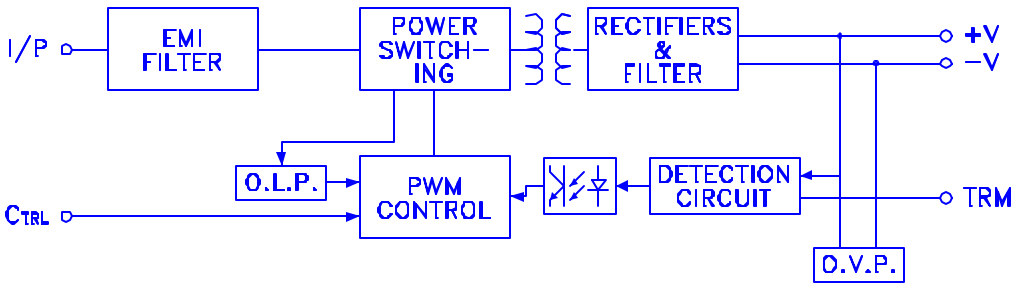
MODEL / SPECIFICATION	SDM30 -12S3	SDM30 -24S3	SDM30 -48S3	SDM30 -12S5	SDM30 -24S5	SDM30 -48S5	SDM30 -12S12	SDM30 -24S12	SDM30 -48S12	SDM30 -12S15	SDM30 -24S15	SDM30 -48S15
DC OUTPUT VOLTAGE	3.3V			5V			12V			15V		
OUTPUT V. TOLERANCE	±3%			±2% MAX.								
OUTPUT RATED CURRENT	5A			5A			2.1A	2.5A		1.7A	2A	
OUTPUT CURRENT RANGE	0-5A			0-5A			0-2.1A	0-2.5A		0-1.7A	0-2A	
RIPPLE & NOISE	75mVp-p			75mVp-p			100mVp-p			100mVp-p		
DC OUTPUT POWER	16.5W			25W			25.2W	30W		25.5W	30W	
LINE REGULATION	±1%											
LOAD REGULATION	±1%											
EFFICIENCY	77%	79%	80%	77%	79%	80%	80%	82%	84%	80%	83%	85%
RATED DC INPUT	12S:12VDC 24S:24VDC 48S:48VDC											
INPUT VOLTAGE RANGE	12S:9.2 ~ 18VDC 24S:18 ~ 36VDC 48S:36 ~ 72VDC											
INPUT CURRENT	12S:3.6A 24S:2A 48S:1A											
TRIM OUTPUT	±13%(TYP.) OUTPUT VOLTAGE			±10%(TYP.) OUTPUT VOLTAGE								
IDLE CURRENT	12S:35mA 24S/48S:30mA											
OVERLOAD PROTECTION	ABOVE 105% TYPE:OVER POWER LIMITING RESET:AUTO RECOVERY											
SHORT CIRCUIT PROTECTION	CONTINUOUS RESET:AUTO RECOVERY											
OVER VOLTAGE PROTECTION	115~150%											
ON/OFF CONTROL	LOGIC "1" OR OPEN:POWER ON LOGIC "0" SHORT TO VIN-:POWER OFF											
TEMP. COEFFICIENT	±0.03% / °C (0~50 °C)											
IN/OUT CAPACITANCE	1000PF											
ISOLATION VOLTAGE	I/P-O/P: 1.0KVDC											
ISOLATION RESISTANCE	I/P-O/P:500VDC / 100M Ohms											
WORKING TEMP., HUMIDITY	-25°C~+85°C(REFER TO OUTPUT DERATING CURVE)											
STORAGE TEMP., HUMIDITY	-25°C~+85°C, 0%~95%											
DIMENSION	2"x2"x0.63" (50.8x50.8x16.0mm)											
WEIGHT	100 gs											
SAFETY / EMI	DESIGN TO MEET: UL1950, EN60950, EN55022 ,FCC PART15J											

NOTE :

1. ALL PARAMETERS ARE SPECIFIED AT RATED INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.
2. TOLERANCE : INCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3. RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4. LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.
5. LOAD REGULATION IS MEASURED FROM 10% TO 100% RATED LOAD.
6. SHORT CIRCUIT NOT MORE THEN 60 SECONDS.
7. DC SOURCE WIRES >=5cm, AN INPUT EXTERNAL AL CAPACITOR 47~100uF IS REQUIRED.

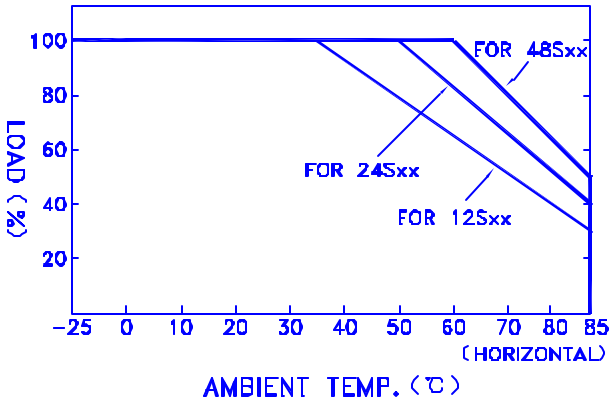
2002-12-23

BLOCK DIAGRAM



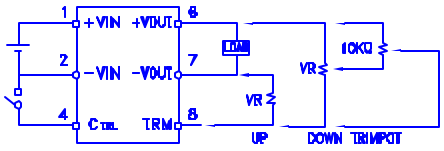
fosc : 225KHz

OUTPUT DERATING



EXTERNAL OUTPUT TRIMMING

OUTPUT MAY OPTIONALLY BE EXTERNALLY TRIMMED(± 10%)
A FIXED RESISTER OR AN EXTERNAL TRIMPOT AS SHOWN



ON/OFF CONTROL PIN

CONTROL INPUT.....PIN4
CONTROL COMMON.....PIN2
LOGIC COMPATIBILITY.....CMOS OR OPEN COLLECTOR TTL
CONTROL VOLTAGE
ON.....+5.5VDC min OR OPEN CIRCUIT
OFF.....+2.5VDC max. OR SHORT TO PIN2

DIMENSION (mm)

- ☒ CASE :
- ☒ PIN NO. ASSIGNMENT
  - ☒ PIN 1 : DC INPUT +V
  - ☒ PIN 2 : DC INPUT −V
  - ☒ PIN 3,5 : NO PIN
  - ☒ PIN 4 : CONTROL ON/OFF
  - ☒ PIN 6 : DC OUTPUT +V
  - ☒ PIN 7 : DC OUTPUT −V
  - ☒ PIN 8 : TRIM